FILED

BEFORE THE BOARD OF OIL, GAS AND MINING DEPARTMENT OF NATURAL RESOURCES STATE OF UTAH

JUL 1 1 2011 SECRETARY, BOARD OF OIL, GAS & MINING

IN THE MATTER OF THE REQUEST FOR AGENCY ACTION OF BERRY PETROLEUM COMPANY FOR AN ORDER OF THE BOARD SUSPENDING THE STATEWIDE WELL SITING RULE, APPROVING **ENHANCED** AND SECONDARY RECOVERY OPERATIONS, AUTHORIZING UNDERGROUND INJECTION, AND GRANTING AUTHORITY TO USE EXISTING PRODUCTION WELLS AS INJECTION WELLS IN A PILOT WATERFLOOD PROJECT IN THE GREEN RIVER FORMATION IN THE E1/2 OF SECTION 21, TOWNSHIP 5 SOUTH, RANGE 4 WEST, USM, DUCHESNE COUNTY, UTAH.

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

Docket No. 2011-006

Cause No. 246-02

This Cause came on for hearing before the Utah Board of Oil, Gas, and Mining (the "Board") on Wednesday May 25, 2011, at approximately 9:00 a.m. in the multipurpose room at the Jennifer Leavitt Student Center, College of Eastern Utah, 451 East 400 North, Price, Utah. The following Board members were present at and participated in the hearing: James T. Jensen, Chairman, Carl F. Kendell, Ruland J. Gill, Jr., Kelly L. Payne, Jean Semborski, Chris D. Hansen. Attending and participating on behalf of the Division of Oil, Gas and Mining (the "Division") was Brad Hill and Dustin Doucet. The Board was represented by Michael S. Johnson and the Division by Emily E. Lewis, both Assistant Attorney Generals. Also appearing at the hearing was Jerry Kenczka on behalf of the United States Bureau of Land Management (the "BLM"). Testifying on behalf of Berry Petroleum Company ("Berry") were Jerry L. Gonzalez, Senior Landman, Jeffrey L. Ehrenzeller, Geologist, and Charles R. Durkoop, Petroleum Engineer. Mark L. Burghardt of Holland & Hart, LLP appeared as counsel for Berry.

The Division, through Mr. Hill, and the BLM, through Mr. Kenczka, both affirmatively expressed their support for the Request. There were no objections made to the Request.

The Board, having considered the testimony presented and the exhibits received into evidence at the hearing held on May 25, 2011, being fully advised, and for good cause appearing, by unanimous vote, hereby makes the following Findings of Fact, Conclusions of Law and Order (the "Order"):

FINDINGS OF FACT

- 1. Berry is a Delaware Corporation in good standing having its principal place of business in Denver, Colorado. Berry is qualified to do business in Utah and is fully and appropriately bonded with all Federal and State agencies.
- 2. The pilot waterflood project covers the following described lands in the Brundage Canyon Area in Duchesne County, Utah:

Township 5 South, Range 4 West, USM

Section 21: E½

(containing 320 acres)

(the "Subject Lands").

3. The Request covered only the Green River Formation, which is defined as follows:

The Lower Green River Formation from the top of the Douglas Creek Member to the base of the Uteland Butte Member found at measured depths of 4,449 feet and 6,022 feet respectively in the open-hole Gamma Ray log run in the Ute Tribal 1-21-54 well located in the NE¼NE¼ of Section 21, Township 5 South, Range 4 West, USM.

- 4. Oil and gas ownership in the Subject Lands is vested in the Ute Indian Tribe of the Uintah and Ouray Reservation. Petitioner is the sole lessee and operating rights owner under BIA 14-20-H-62-3414, dated January 30, 1976, covering all of Section 21, Township 5 South, Range 4 West, USM.
- 5. The proposed project is a small scale lease-basis pilot waterflood project (the "Pilot Project") consisting of eight waterflood injection wells (the "Injection Wells") and three waterflood production wells ("Production Wells") all located on the Subject Lands. The three Injection Wells will be located on an approximate 20 acre well density, in a five spot pattern of four Injection Wells centered around one Production Well.
- 6. The eight Injection Wells are previously producing oil and gas wells that have been, or will be, converted from producing wells to water injection wells. The following is a list of the Injection Wells:

API No.	Well Name	Location
43-013-33388	Ute Tribal 1-21-54	NE¼NE¼
43-013-31280	Z&T Ute Tribal 2-21	NW ¹ / ₄ NE ¹ / ₄
43-013-32623	Ute Tribal 7-21-54	SW¼NE¼

43-013-30829	B C Ute Tribal 8-21	SE½NE¼
43-013-33040	Ute Tribal 9-21-54	NE ¹ / ₄ SE ¹ / ₄
43-013-31283	Z&T Ute Tribal 10-21	NW ¹ / ₄ SE ¹ / ₄
43-013-33114	Ute Tribal 15-21-54	SW1/4SE1/4
43-013-32381	Ute Tribal 16-21-54	SE1/4SE1/4

7. In addition to the Injection Wells, Berry has located and plans on drilling the following Production Wells on the Subject Lands:

Well Name

Ute Tribal 7I-21D-54

Ute Tribal 8L-21D-54

Ute Tribal 10S-21D-54

- 8. The Pilot Project is necessary to determine, whether the value of the estimated recovery of oil or gas substantially exceeds the estimated costs incident to conducting enhanced and secondary recovery operations by waterflood on the Subject Lands within the Green River Formation. Berry expects that, if successful the Pilot Project could as much as double the ultimate recovery from the Subject Lands.
- 9. The Green River Formation consists of discontinuous sandstone beds. The connectivity of the lenticular sandstone reservoirs in the Lower Green River Formation is particularly problematic when designing and operating waterflood projects near the Subject Lands. Wells drilled on a 40 acre basis may not intersect a sufficient number of

"connected" sandstone reservoirs for the waterflood project to be economical. Thus, the geology of the Green River Formation underlying the Subject Lands requires that the Production Wells be located on approximately 20 acre well density to maximize ultimate recovery. This is not in conformity with, and requires suspension of, the statewide well siting rule contained in Utah Admin. Code R649-3-2.

- 10. The eight Injection Wells are located on Tribal Lands, and thus require EPA approval. Berry has obtained EPA permits for all eight of the Injection Wells.
- 11. Mr. Kenczka has indicated that the BLM supports the Pilot Project both through a formal letter filed with the Board on May 11, 2011 and through representations made during the hearing on May 25, 2011.
- 12. A copy of the Request was mailed, certified and postage paid, to all royalty, record title and operating rights owners within the Subject Lands and to the operating rights owners in the Subject Formation in the leases and lands adjacent to the Subject Lands, at their last known address disclosed by the relevant Federal and Duchesne County realty records. Notice of the Request was not originally mailed to the BLM, however, a copy of the Request was sent via email on April 13, 2011 to Mr. Kenczka. Furthermore, a subsequent presentation of the Pilot Project was made to Mr. Kenczka at the BLM Vernal Field Office on April 28, 2011. Mr. Kenczka also attended the May 25, 2011 hearing.
- 13. Notice of the May 25, 2011 hearing was duly published as required by Utah Admin. Code R641-106-100.

14. The vote of the Board members present at the May 25, 2011 hearing in this Cause was unanimous in favor of granting the Request.

CONCLUSIONS OF LAW

- 1. Due and regular notice of the time, place, and purpose of the hearing was properly given to all parties whose legally protected interests are affected by the Request in the form and manner as required by law and the rules and regulations of the Board and Division.
- 2. The Board has jurisdiction over all matters covered by the Request and all interested parties therein, and has the power and authority to render the order herein set forth pursuant to Utah Code Ann. § 40-6-1. *et seq*.
- 3. The Pilot Project for testing of the enhanced and secondary recovery operations from the Green River Formation in the Subject Lands is just and reasonable under the circumstances, is in the public interest, will promote conservation, will increase ultimate recovery, will prevent waste, will protect the correlative rights, and is necessary to fulfill the purposes of Chapter 6 of Title 40 of the Utah Code.
- 4. Berry has sustained its burden of proof, demonstrated good cause, and satisfied all legal requirements for the granting of the Request.

ORDER

Based upon the Request, testimony, and other evidence submitted, and the findings of fact and conclusions of law stated above, the Board hereby orders:

- 1. The Request in this Cause is granted.
- 2. Enhanced and secondary recovery operations in the Green River Formation on the Subject Lands are approved.
- 3. Underground injection of water in the reservoir of the Green River Formation is authorized.
- 4. The Injection Wells listed in Paragraph 6 above are authorized to be used as injection wells for enhanced and secondary recovery operations.
- 5. The statewide well siting rule, Utah Admin. Code R649-3-2, is suspended with respect to the Subject Lands as to the Green River Formation.
- 6. The Board has considered and decided this matter as a formal adjudication, pursuant to the Utah Administrative Procedures Act, Utah Code Ann. §§ 63G-4-204 through 208, and of the Rules of Practice and Procedure before the Board of Oil, Gas and Mining, Utah Admin. Code R641.
- 7. This Order is based exclusively upon evidence of record in this proceeding or on facts officially noted, and constitutes the signed written order stating the Board's decision and the reasons for the decision, as required by the Utah Administrative Procedures Act, Utah Code Ann. § 63G-4-208, and the Rules of Practice and Procedure

before the Board of Oil, Gas and Mining, Utah Admin. Code R641–109; and constitutes a final agency action as defined in the Utah Administrative Procedures Act and Board rules.

- 8. Notice of Right of Judicial Review by the Supreme Court of the State of Utah. As required by Utah Code Ann. § 63-G-4-208(e) through (g), the Board hereby notifies all parties to this proceeding that they have the right to seek judicial review of this Order by filing an appeal with the Supreme Court of the State of Utah within 30 days after the date this Order is entered. Utah Code Ann. § 63G-4-401(3)(a) and 403.
- 9. **Notice of Right to Petition for Reconsideration.** As an alternative, but not as a prerequisite to judicial review, the Board hereby notifies all parties to this proceeding that they may apply for reconsideration of this Order. Utah Code Ann. § 63G-4-302. The Utah Administrative Procedures Act provides:
 - (1) (a) Within 20 days after the date that an order is issued for which review by the agency or by a superior agency under Section 63–46b–12 is unavailable, and if the order would otherwise constitute final agency action, any party may file a written request for reconsideration with the agency, stating the specific grounds upon which relief is requested.
 - (b) Unless otherwise provided by statute, the filing of the request is not a prerequisite for seeking judicial review of the order.
 - (2) The request for reconsideration shall be filed with the agency and one copy shall be sent by mail to each party by the person making the request.
 - (3)(a) The agency head, or a person designated for that purpose, shall issue a written order granting the request or denying the request.
 - (b) If the agency head or the person designated for that purpose does not issue an order within 20 days after the filing of the request, the request for reconsideration shall be considered to be denied. *Id.*

The Rules of Practice and Procedure before the Board of Oil, Gas and Mining entitled "Rehearing and Modification of Existing Orders" state:

Any person affected by a final order or decision of the Board may file a petition for rehearing. Unless otherwise provided, a petition for rehearing must be filed no later than the 10th day of the month following the date of signing of the final order or decision for which the rehearing is sought. A copy of such petition will be served on each other party to the proceeding no later than the 15th day of that month. Utah Admin. Code R641–110–100.

The Board hereby rules that should there be any conflict between the deadlines provided in the Utah Administrative Procedures Act and the Rules of Practice and Procedure before the Board of Oil, Gas and Mining, the later of the two deadlines shall be available to any party moving to rehear this matter. If the Board later denies a timely petition for rehearing, the aggrieved party may seek judicial review of the order by perfecting an appeal with the Utah Supreme Court within 30 days thereafter.

- 10. The Board retains exclusive and continuing jurisdiction of all matters covered by this Order and of all parties affected thereby; and specifically, the Board retains and reserves exclusive and continuing jurisdiction to make further orders as appropriate and authorized by statute and applicable regulations.
- 11. The Chairman's signature on a facsimile copy of this Order shall be deemed the equivalent of a signed original for all purposes.

DATED this ______ day of the 2011.

STATE OF UTAH BOARD OF OIL, GAS, AND MINING

ames T. Jensen, C

5131964_1.DOCX

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and correct copy of the foregoing FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER for Docket No. 2011-006, Cause No. 246-02 to be mailed with postage prepaid, this 11td day of July, 2011, to the following:

A. John Davis Mark L. Burghardt Holland & Hart LLP 222 South Main Street, Suite 2200 Salt Lake City, UT 84101-2001

Michael S. Johnson Assistant Attorneys General Utah Board of Oil, Gas & Mining 1594 West North Temple, Suite 300 Salt Lake City, UT 84116 mikejohnson@utah.gov [Via Email]

Steven F. Alder
Assistant Attorneys General
Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 300
Salt Lake City, UT 84116
stevealder@utah.gov
[Via Email]

Berry Petroleum Company 1999 Broadway Street, Suite 3700 Denver, CO 80202

United States of America in Trust for the Ute Indian Tribe of the Uintah and Ouray Reservation, Utah c/o Bureau of Indian Affairs Uintah & Ouray Agency 988 South 7500 East P.O. Box 130 Fort Duchesne, UT 84026

Julie Am Carter